

What is claimed is:

1. A universal power module for providing power to a wireline logging system, the module comprising:

a rectifier section operable to receive an alternating current (AC) input signal and generate a first direct current (DC) power signal as an output;

a converter section cascadedly coupled to the rectifier section, the converter section converting the first DC power signal to a second DC power signal wherein the second DC power signal is floated with respect to the first DC power signal and a ground;

an inverter section cascadedly coupled to the converter section, the inverter section being operable to generate an output power signal in response to receiving the second DC power signal;

a control section coupled to the rectifier section, the converter section, the inverter section and a communications link, wherein the communications link is operable to receive information describing waveforms for the output power signal, wherein the control section is operable to receive the information and control a corresponding section to generate the waveforms in response to receiving the information; and

wherein the output power signal is suitable for powering at least one logging device included in the wireline logging system.
2. The module of claim 1, wherein the output power signal is selectively a) the second DC power signal, b) the second DC power signal having a reverse polarity, or c) an AC output signal.
3. The module of claim 1, wherein the information includes definitions for an amplitude, frequency, and duty cycle for the output power signal or definitions for a voltage level of the first and second DC power signals.
4. The module of claim 1, wherein the inverter section includes first, second, and third output terminals for electrically coupling the output power signal to the at least one logging

device, wherein the first and third output terminals provide a floating point output and the second output terminal provides a center tap.

5. The module of claim 4, wherein the center tap is coupled a voltage output to inject a common mode power signal on the first and third output terminals.
6. The module of claim 1, further comprising a plurality of additional universal power modules coupled in a power sharing arrangement to form a wireline power system, wherein each universal power module is operable to provide at least a portion of the power required by the wireline logging system.
7. The module of claim 6, wherein the wireline power system includes at least two of the universal power modules coupled in parallel to combine their respective individual currents, the combined currents being sufficient to operate the at least one logging device.
8. The module of claim 6, wherein the wireline power system includes a system control unit operable to control each of the respective control sections of the plurality of the universal power modules, wherein the portion of the power provided by each universal power module is defined by the system control unit.
9. The module of claim 6, wherein the wireline power system includes at least one redundant universal power module, wherein the redundant universal power module is operable when any one of the plurality of the universal power modules becomes inoperable.
10. The module of claim 1, wherein the AC input signal is a three-phase AC signal and wherein the rectifier section includes a three-phase rectifier section having a passive power factor correction (PFC) section as an input.
11. The module of claim 1, wherein the AC input signal is a three-phase AC signal and wherein the rectifier section includes a three-phase rectifier section having an active power factor

correction (PFC) section as an input.

12. The module of claim 1, wherein the AC input signal is a single-phase AC signal and wherein the rectifier section includes a single-phase rectifier section having an active power factor correction (PFC) section or a passive PFC section as an input.
13. The module of claim 1, wherein the rectifier section is adapted to receive the AC input signal and wherein the AC input signal conforms to at least one power distribution standard published by The International Electrotechnical Commission (IEC).
14. The module of claim 1, wherein the converter section is operable to boost the second DC power signal to a predetermined voltage level and wherein the predetermined voltage level is sufficient to operate the at least one logging device.
15. The module of claim 1, wherein the inverter section is operable to be statically switched as directed by the control section.
16. A method of providing power to a wireline logging system, the method comprising:
receiving an alternating current (AC) input signal to generate a first direct current (DC) power signal, the first DC power signal being generated by a rectifier section responsive to the receiving of the AC input signal;
transferring the first DC power signal to a converter section cascadedly coupled to the rectifier section;
converting the first DC power signal to a second DC power signal thereby causing the second DC power signal to be floated with respect to the first DC power signal and a ground, the second DC power signal being converted from the first DC power signal by the converter section;
transferring the second DC power signal to an inverter section cascadedly coupled to the converter section;
generating an output power signal responsive to the inverter section receiving the second DC

power signal; and

wherein a control section is operable to receive information describing waveforms for the output power signal, wherein the control section is operable to direct the rectifier section, the converter section and the inverter section to generate the waveforms, wherein the output power signal provides the power to at least one logging device included in the wireline logging system.

17. The method of claim 16, wherein the output power signal is selectively a) the second DC power signal, b) the second DC power signal having a reverse polarity, or c) an AC output signal.
18. The method of claim 16, wherein the information is generated by a software program included in a computer system coupled to the communications link, wherein the information includes definitions for an amplitude and a frequency for the output power signal or definitions for a voltage level of the first and second DC power signals.
19. The method of claim 16, wherein the inverter section includes a first, second and third output terminals for electrically coupling the output power signals to the at least one logging device, wherein the first and third output terminals provide a floating point output and the second output terminal provides a center tap.
20. The method of claim 19, wherein the center tap is coupled to a voltage output to inject a common mode power signal on the first and third output terminals.
21. The method of claim 16, comprising:
coupling a plurality of the universal power modules in a power sharing arrangement to form a wireline power system, wherein each universal power module is operable to provide at least a portion of the power required by the wireline logging system.
22. The method of claim 21, wherein the wireline power system includes the plurality of the

universal power modules being coupled in parallel to combine individual currents generated by each universal power module, the combined currents being sufficient to operate the at least one logging device.

23. The method of claim 21, wherein the wireline power system includes the plurality of the universal power modules being coupled in series to combine individual voltages generated by each universal power module, the combined voltages being sufficient to operate the at least one logging device.
24. The method of claim 21, wherein the wireline power system includes at least one redundant universal power module, wherein the redundant universal power module is operable when any one of the plurality of the universal power modules becomes inoperable.
25. The method of claim 16, wherein the AC input signal is a three-phase AC signal, wherein the rectifier section includes a three-phase rectifier section having a passive power factor correction (PFC) section as an input.
26. The method of claim 16, wherein the AC input signal is a three-phase AC signal, wherein the rectifier section includes a three-phase rectifier section having an active power factor correction (PFC) section as an input.
27. The method of claim 16, wherein the AC input signal is a single-phase AC signal, wherein the rectifier section includes a single-phase rectifier section having an active power factor correction (PFC) section or a passive PFC section as an input.
28. The method of claim 16, wherein the rectifier section is adapted to receive the AC input signal, wherein the AC input signal conforms to at least one power distribution standard published by The International Electrotechnical Commission (IEC).
29. The method of claim 16, wherein the converter section is operable to boost the second DC

power signal to a predetermined voltage level, wherein the predetermined voltage level is sufficient to operate the at least one logging device.

30. The method of claim 16, wherein the inverter section is operable to be statically switched as directed by the control section.
31. A wireline power system for providing power to a wireline logging system, the system comprising:
 - a plurality of universal power modules, wherein each of the universal power modules are substantially similar, wherein each of the universal power modules is operable to receive an alternating current (AC) input signal and generate an output power signal having a defined waveform, wherein at least a portion of the universal power modules having a substantially similar output power signal are coupled to form a power sharing arrangement; and
 - a system control unit coupled to each of the universal power modules, wherein the system control unit is operable to control at least a portion of the power provided by each universal power module included in the power sharing arrangement.
32. The system of claim 31, wherein each of the universal power modules comprises:
 - a rectifier section operable to receive the AC input signal and generate a first direct current (DC) power signal as an output;
 - a converter section cascadedly coupled to the rectifier section, the converter section converting the first DC power signal to a second DC power signal thereby causing the second DC power signal to be floated with respect to the first DC power signal and a ground;
 - an inverter section cascadedly coupled to the converter section, the inverter section being operable to generate the output power signal in response to receiving the second DC power signal; and
 - a control section coupled to the rectifier section, the converter section, the inverter section and a communications link, wherein the communications link is operable to receive information describing waveforms for the output power signal, wherein the control section is operable to receive the information and control a corresponding section to

generate the waveforms in response to receiving the information.

33. The system of claim 31, wherein the output power signal is selectively one of an N number of the substantially similar output power signals.
34. The system of claim 33, wherein the number of the power sharing arrangements formed is equal to N.
35. The system of claim 33, wherein the plurality of the universal power modules are at least equal to the N number.
36. The system of claim 31, wherein the plurality of the universal power modules are coupled in parallel to combine individual currents generated by each universal power module, the combined currents being sufficient to operate at least one logging device of the wireline logging system.
37. The system of claim 31, wherein a center tap of a first module or parallel combination of modules included in the plurality of universal power modules is operable to receive an output of a second module or the parallel combination of modules to inject a common mode power signal on the output of the first module or the parallel combination of modules.
38. The system of claim 31, wherein the wireline power system includes at least one redundant universal power module, wherein the redundant universal power module is operable when any one of the plurality of the universal power modules becomes inoperable.